Determining System Size and Extent

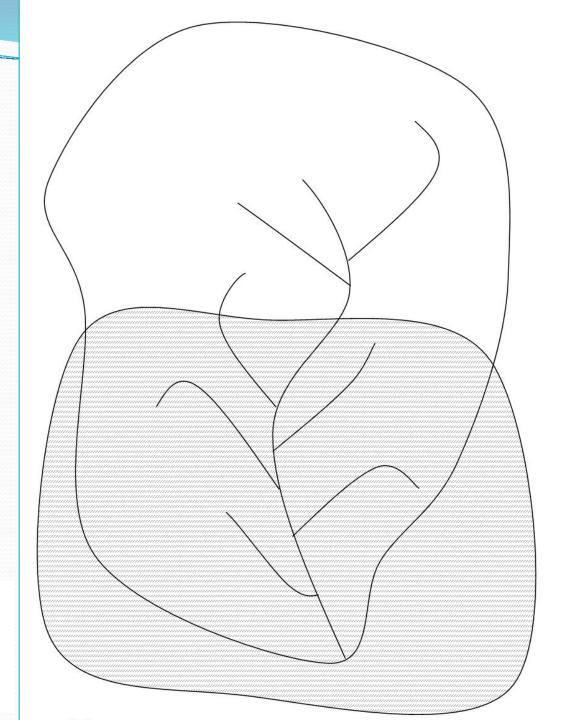
Delineating the MS4 System

- Determine "Regulated Land"
 - The conveyances and drainage area served by the permittee's MS4. For Phase II MS4s regulated land is the conveyances and drainage area that falls within a Census Designated Urbanized Area.
- Extent of the System and Service Area (acres draining to the system) as of June 30, 2009
 - Lands in transition pre-construction condition
- Phase II Permittees Boundaries
 - First Permit Cycle: 2000 Census Designated Urbanized Area, Next Permit Cycle: 2010 Census Designated Urbanized Area
 - Permittees may plan for expanded areas during this permit cycle

Phase II Permittee Example

For Phase II permittees, the regulated system is bounded by the 2000 urbanized census for this permit cycle.

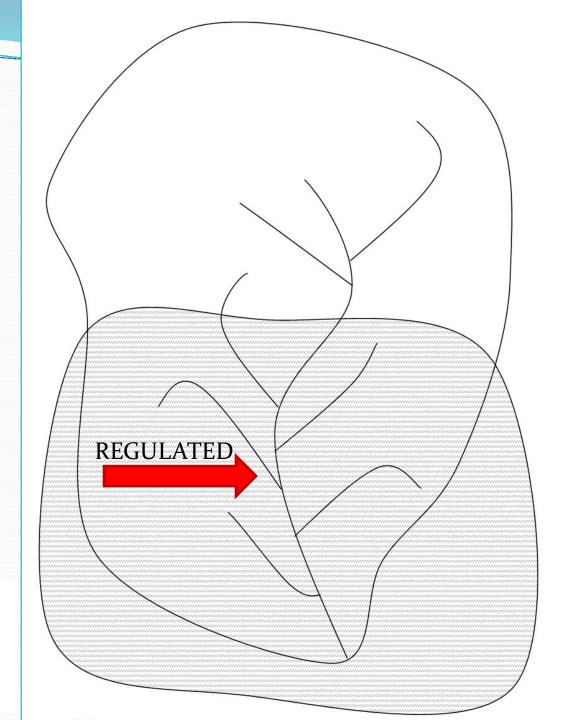
KEY Conveyances ____ Permittee ___ 2000 US Census Urbanized Area



Phase II Permittee Example

For Phase II permittees, the regulated system is bounded by the 2000 urbanized census for this permit cycle.

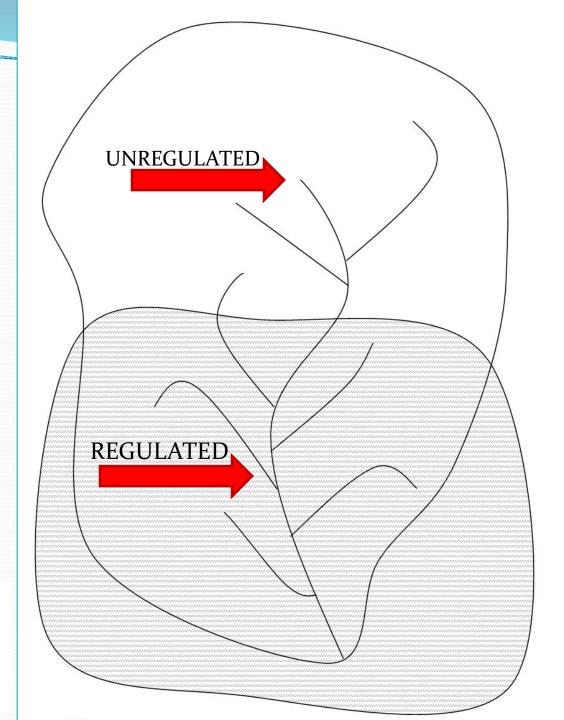
KEY Conveyances —— Permittee —— 2000 US Census Urbanized Area



Phase II Permittee Example

For Phase II permittees, the regulated system is bounded by the 2000 urbanized census for this permit cycle.

KEY Conveyances —— Permittee —— 2000 US Census Urbanized Area



Overlap Between Systems

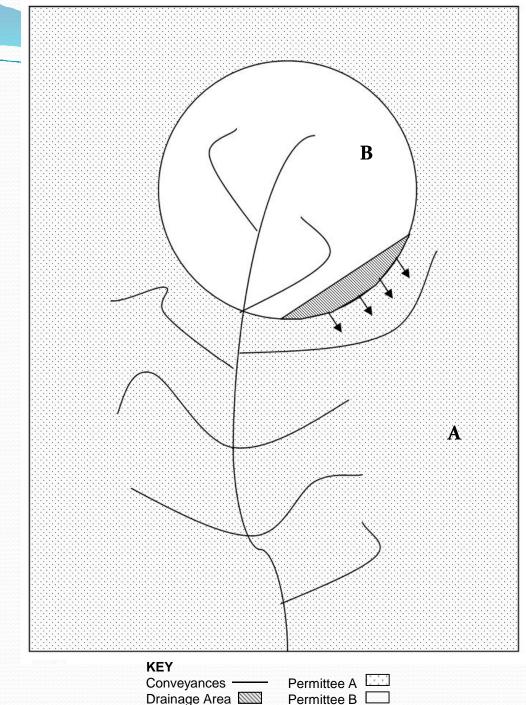
- Permittees are responsible for their service area all acres that drain through sheetflow to their system
- These drainage areas may cross jurisdictional boundaries
- Department recommends developing agreements to resolve these issues
 - E.g. An agreement may assign all acres draining to any MS4 within a jurisdiction to that MS4

Jurisdictional Overlap Example

Permittee A's MS4 system's "service area" extends into Permittee B's jurisdiction. Or, lands located in Permittee B's jurisdiction drain to Permittee A's conveyances.

Permittee A is responsible for POC loads from that drainage area.

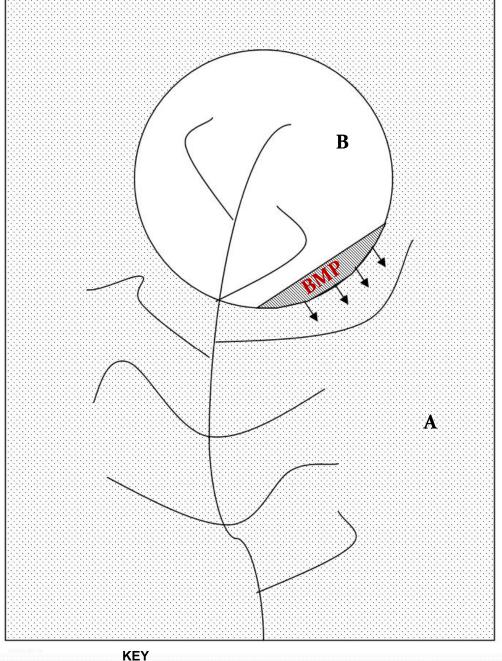
The Department recommends permittees develop agreements to resolve any interjurisdictional overlap issues.



Jurisdictional Overlap Example

If a permittee installs a BMP within its jurisdiction, that permittee will receive credit towards its required reductions.

If a BMP is installed by jurisdiction B, that jurisdiction will receive credit for the BMP even if it is located in a drainage area that drains to permittee A.

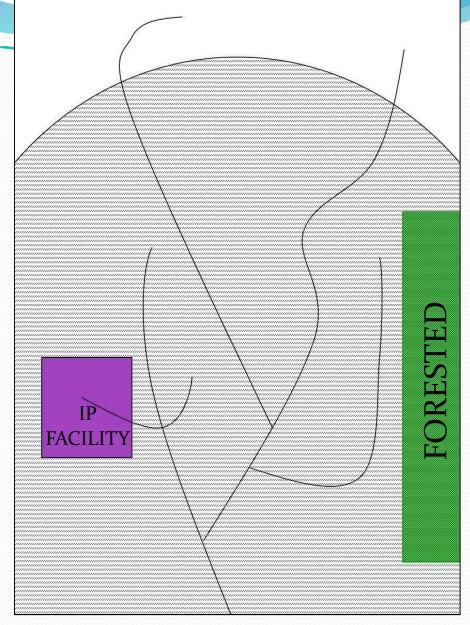


Conveyances — Permittee A Permittee B —

Excluded Lands

- Permittees may exclude the following lands from their system:
 - Land Regulated under the Industrial Stormwater GP
 - Land Regulated under an Individual Stormwater VPDES Permit
 - Open Waters
 - Forested Lands
- No Double Counting

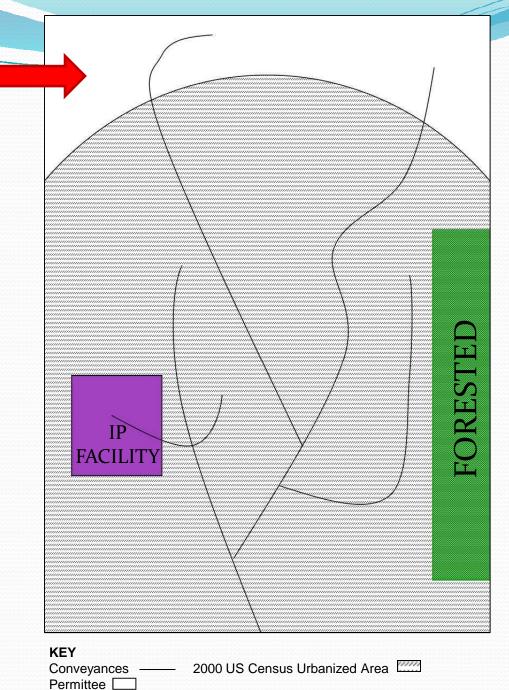
This Phase II Permittee may exclude:





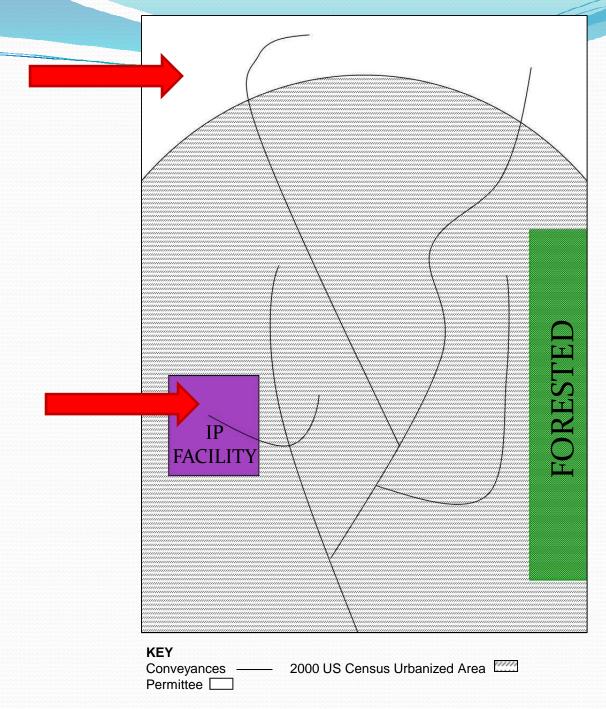
This Phase II Permittee may exclude:

•Lands outside the Census Designated Urbanized Area



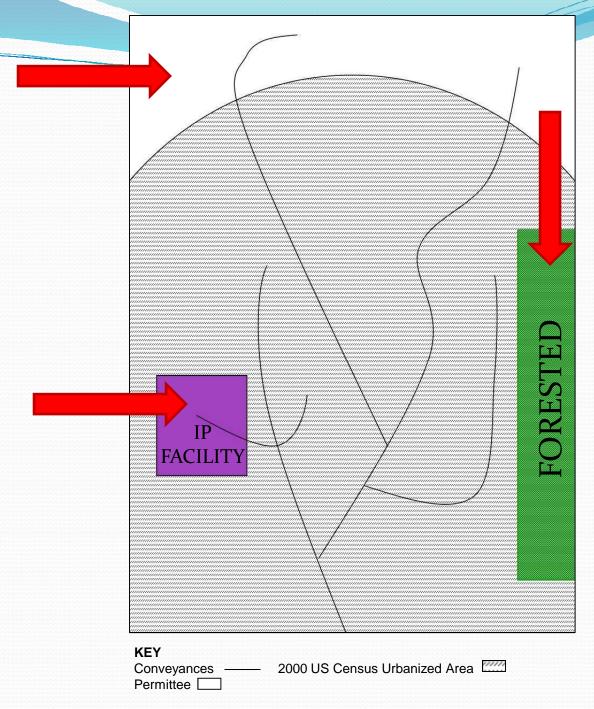
This Phase II Permittee may exclude:

- •Lands outside the Census Designated Urbanized Area
- •Facilities with an Individual VPDES Permit



This Phase II Permittee may exclude:

- •Lands outside the Census Designated Urbanized Area
- •Facilities with an Individual VPDES Permit
- •And, Forested Lands



Determining Pervious and Impervious Surface

- Commonwealth Resources
 - VEGIS Aerials may be used for analysis
- Permittee should provide a description of methodology
- Fill out tables to determine reductions for existing development (Special Condition Requirement 5 & 6).